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NEW SPECIES OF FISH FROM THE WEST INDIES

BY WILLIAM BEEBE AND GLORIA HOLLISTER

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NEW SPECIES OF FISH FROM THE WEST INDIES¹

BY WILLIAM BEEBE AND GLORIA HOLLISTER

Long-barbelled Flyingfish

CYPSELURUS ANTAREI SP. NOV.

(Fig. 15)

TYPE: *and only specimen, Antares Expedition Number 6. June 30, 1932. At 2 P. M. flew on board Yacht Antares, in 21° 50' No. Lat. and 63° 32' West Long., about two hundred miles north of Sombrero, B. W. I.*

MEASUREMENTS: Total length 85 mm.; Standard length 71 mm.; Depth 14 (5); Head 19 (3.7); Eye 6 (3); Snout 4 (4.7); Dorsal 13; Anal 9; Pectoral length 45 (1.5); Pelvic length 28 (2.5); Barbel length 73, reaching to end of body (lower jaw being 2 mm. in advance of upper).

COLOR: Steel blue above, light below, changing to silvery; vertical fins clear; pectorals pale at base, blackening toward tips; distal four-fifths of pelvics black.

BARBEL: The barbel of this fish is single, extremely soft and delicate, tapering very gradually from its base on the lower lip to the spider-web-like tip. It is attached around the entire curve of the mandible and is continued on each side into a rounded flap. The outer edges of the two flaps are joined by membrane to the outer sides of the barbel so that when it is extended to the full, backward, there is a very broad, rounded area of curved tissue (the hollow enclosing the lower jaw and chin), which rather abruptly flattens out into the wide, slightly curved ribbon of the barbel.

This is jet black, studded with minute blue dots, except down the center which is paler. Beneath, the central area widens rapidly until its fleshy white has replaced almost all the black pigment, but the black of the upper side holds strongly to the very tip.

¹ Contribution, New York Zoological Society, Department of Tropical Research, No. 410.

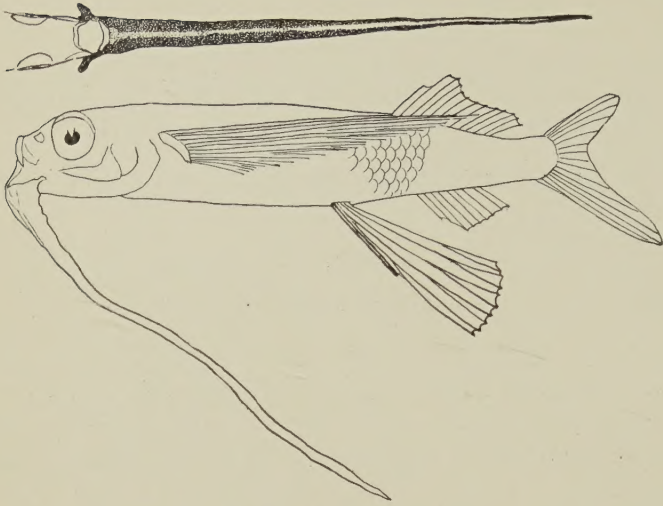


Fig. 15. Long-barbelled Flyingfish, *Cypselurus antarei* sp. nov. The upper figure represents the anterior side of the barbel.

Drawing by Helen Tee-Van

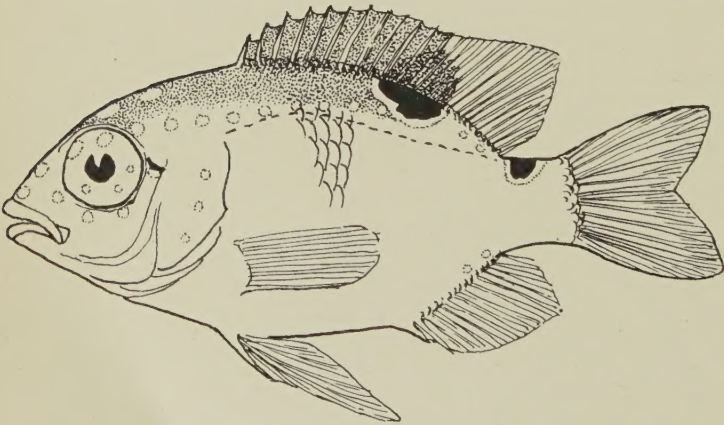


Fig. 16. Scarlet-backed Demoiselle, *Eupomacentrus rubridorsalis* sp. nov.

Drawing by Helen Tee-Van

Compared with Nichols and Breder's *Cypselurus monroei*, this fish is 3 instead of 2 inches long; the barbel is single, not double; tissue-like, not fleshy; flattened, not fluted; as long as the body, not half as long, and it arises from the lip, not the chin.

Scarlet-backed Demoiselle

A new and abundant species of this group

EUPOMACENTRUS RUBRIDORSALIS SP. NOV.

(Fig. 16)

DISCUSSION: On the twelfth of August, 1930, while swimming along the north-east shore of Nonsuch, Bermuda, and looking down through a water-glass, I saw a brightly colored Demoiselle quite new to me. The following day, in company with Hollister and Crouch I again found the fish, two of them this time, near the same place, about a coral boulder. I tried in vain to capture them on three successive days and after scrutinizing them carefully I finally exploded a dynamite cap near them, but could find no trace and never saw them again. I dictated the details of pattern and coloration for a colored plate and forgot about them.

In July 1932, on the Antares in the West Indies, Hollister and I found this species to be very common in certain of the islands, and have named and described it as follows:

EUPOMACENTRUS RUBRIDORSALIS, sp. nov.

TYPE: *Antares Number 97; Fifteenth Expedition of the Department of Tropical Research of the New York Zoological Society; July 9th, 1932. Taken near shore in Chatham Bay, Union Island, Grenadines, B. W. I. Standard length 15.5 mm. A second specimen, Antares Number 145, was taken July 18th, 1932, in a tidepool in Deep Bay, Antigua. In length, measurements, pattern and coloration the two are identical.*

FIELD CHARACTERS: A typical Demoiselle in shape and habits; dark blue in general, with top of head, upper sides and spinous dorsal fin scarlet; two ocelli, black with turquoise border, one between

spinous and soft dorsal, and the other on upper aspect of caudal peduncle.

MEASUREMENTS AND COUNTS: Total length 17.8 mm.; Standard length 15.5 mm.; Depth 7.5 (2); Head 6 (2.58); Eye 2.2 (2.7); Snout 1.7 (3.5); Maxillary 1.7 (3.5); Pectoral length 4.6; Pelvic length 4.8; Dorsal count XII, 16; Anal count II, 13; Scales 29; Gill-rakers 8.

DESCRIPTION: Body dark blue (bluish gray after death); upper head and back above lateral line scarlet, thickly flecked with black; dorsal spines solid scarlet; dorsal rays and anal dusky at base, the remainder translucent bluish; very large ocellus, larger than eye, at junction of dorsal spines and rays, consisting of a large, jet-black center, surrounded with a ring of turquoise, with a narrow outer frame of black. A series of turquoise spots, framed with black, scattered over head and body as follows: 2 between upper lip and upper eye; 5 surrounding eye; 3 on opercle; 8 in a line, from eye almost to first ocellus; 3 large ones on each side of top of head, one obliquely above and in front of eye, one above eye, one on nape; 5 in iris, upper two large and stronger and connecting the loral and dorsal lines; 2 at base of posterior dorsal rays; 2 at base of posterior anal rays.

There is a second ocellus, one-third as large as the dorsal one, on the upper peduncle; Iris, aside from the turquoise spots, golden.

DISTRIBUTION: The two which I saw but could not capture in Bermuda are the only ones ever recorded from that island. The colored plate which I had drawn from memory had in no particular to be changed when compared with a fresh specimen from the West Indies. The following is the distribution of this new species and of its most closely related known form, as we observed it in the West Indies:

	<i>E. rubridorsalis</i>	<i>E. leucostictus</i>
Union Island, Grenadines (Type locality).....	Abundant	Absent
Tobago Cays, Grenadines.....	Common	Several seen
Antigua.....	Common	Common
Barbuda.....	Common	Common
Haiti.....	Absent	Abundant
Bermuda.....	Two seen	Abundant

Having no dynamite caps, and owing to the absence of tide-pools in the Leeward Islands, I was able to capture only two specimens of this new species, which however, although from different islands, three hundred miles apart, are identical in measurements, pattern and coloration.

We saw many, from two to three inches in length, always in pairs, and, as in other species of this genus, constantly on the defensive, attacking and driving away all intruders, large and small, from their chosen home.

There is no doubt that this is an adult coloration, distinctly marked, not a permanent color phase, not grading, sexually, emotionally or ontogenetically into any other phase. Both in haunts, habits, size and general pattern *rubridorsalis* offers an interesting comparison with *leucostictus*.

Grenada Sponge Goby

GOBIOSOMA CHANCEI SP. NOV.

(Fig. 17)

TYPE: *And only specimen, Antares Expedition, New York Zoological Society, No. 22. July 4th, 1932. Taken from a large, yellow sponge on a shallow reef in St. George's Bay, Grenada, B. W. I.*

MEASUREMENTS: Total length 47 mm.; Standard length 39 mm.; Depth 9 (4.3); Head 10.7 (3.6); Eye 2.5 (4.3); Snout 1.7 (6.3); Maxillary 4 (2.7); Dorsal VII-12; Anal 10.

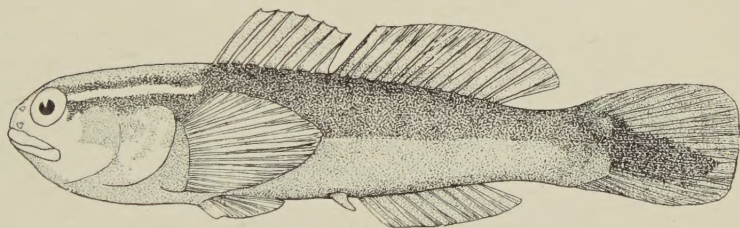


Fig. 17. Grenada Sponge Goby, *Gobiosoma chancei* sp. nov.

Drawing by Helen Tee-Van

COLOR: General body dark brown below, darkening into black above; entire lower center of caudal fin black; lips, chin and throat bright lemon yellow; iris greenish; a strong yellow line extending from the top of each eye, back along each side of the head, ending abruptly midway between the beginning of the first dorsal fin and the upper base of the pectoral. This line is bounded widely on each side with jet black.

COMPARISON: This species is closest to *Gobiosoma horsti* Metze-
laar, differing chiefly in pattern, color and the relative positions of
all the fins, as well as the absence of scales on the caudal peduncle.
Briefly expressed, in *Gobiosoma chancei* the colored lateral line is
short, not long, and it is yellow, not blue; the first dorsal fin arises
behind, not before the pectoral base; the second dorsal arises in front
of, not behind the anus; the pelvics are well developed, not minute,
and they arise behind, not in front of the pectorals. There is no trace
of scales, even on the peduncle or along the sides.

This species is named in honor of Colonel Edwin M. Chance to
whose interest and generosity this West Indian expedition was due.